

Application no.: 09/974,882

Docket no.: GTI-1320-CON1

AMENDMENTIn the claims:

Please amend the claims as follows:

1-20. (Canceled)

21. (Currently amended) A method for ~~the ex vivo introduction of~~ introducing at least one chromosome into a human or animal eukaryotic cell in vitro, ~~wherein said cell is not a plant cell,~~ said method comprising contacting said cell and at least one chromosome ~~substantially simultaneously with the application of~~ an electric pulse ~~to the cell~~ under conditions sufficient to cause transformation of said cell by said chromosome, wherein the at least one chromosome is a gene-bearing DNA/protein complex, a natural human chromosome, a mammalian chromosome, an artificial chromosome, a yeast chromosome, and wherein said at least one chromosome is encapsulated in a liposome.

22-23. (Canceled)

24. (Original) The method of claim 21, wherein the method further comprises verifying that the cell has been transformed with the at least one chromosome.

25. (Previously amended) The method of claim 24, wherein the verifying involves fluorescence activated cell sorting of the cells to obtain those cells that contain the at least one chromosome.

26. (Currently amended) A method for ~~the ex vivo introduction of~~ introducing at least one chromosome into a human or animal eukaryotic cell in vitro, ~~wherein said cell is not a plant cell,~~ said method comprising (i) contacting said cell and at least one chromosome ~~substantially simultaneously with the application of~~ an electric pulse ~~to the cell~~ under conditions sufficient to cause transformation of said cell by said chromosome, wherein the at least one chromosome is a

Application no.: 09/974,882

Docket no.: GTI-1320-CON1

gene-bearing DNA/protein complex, a natural human chromosome, a mammalian chromosome, an artificial chromosome, a yeast chromosome, and wherein said at least one chromosome is encapsulated in a liposome, and (ii) verifying that the cell has been transformed with the at least one chromosome.

27. (New) the method of claim 21, wherein the cell is contacted with an encapsulated single chromosome.

28. (New) the method of claim 21, wherein said at least one chromosome comprises protein.

29. (New) the method of claim 21, wherein said at least one chromosome comprises in the range of about 40-60 percent protein by weight.

30. (New) the method of claim 21, wherein said at least one chromosome comprises about 50% protein by weight.

31. (New) the method of claim 26, wherein the cell is contacted with an encapsulated single chromosome.

32. (New) the method of claim 26, wherein said at least one chromosome comprises protein.

33. (New) the method of claim 26, wherein said at least one chromosome comprises in the range of about 40-60 percent protein by weight.

34. (New) the method of claim 26, wherein said at least one chromosome comprises about 50% protein by weight.